#### TRAFFIC CONTROL PLAN AND SPECIFICATIONS PURSUANT TO BT6.33 SAFETY

Unless otherwise agreed, the following measures are required to provide adequate warning of hazards for users of roads and trails adjacent to Purchaser's Operations.

## Part I. Signing and Other Warning Methods:

(a) Signs. The following signs are required when Purchaser's Operations are in progress adjacent to or on Forest Service controlled roads and trails:

MINIMUM LETTER SIZE AND LEGEND	MINIMUM SIZE <u>AND</u> <u>SHAPE</u>	WHEN AND WHERE REQUIRED
1. LOGGING OPERATIONS NEXT <> MILES (4" letters)	24" (rectangle) 36"	Min. 100 ft. outside of any continuous work areas, on roads listed in CT5.31# and trails listed in Part II.
2. LOGGING OPERATIONS (3" letters)	24" (diamond) 24"	To be used in conjunction with "Logging Operations Next Miles" and where work area is not continuous.
3. FOR LOGGING USE ONLY (3" letters)	24" (diamond) 24"	Required where roads listed in CT5.31# and temporary roads intersect with CT5.31# roads. Install a cross ditch to discourage use when sign is covered or removed for extended periods.
4. TRUCKS (4" letters)	24" (diamond) 24"	At critical intersections on roads listed in CT5.31# when traffic is heavy or otherwise exceeds volumes stated in Part II below. Remove or cover when the sign is not applicable.
5. END LOGGING OPERATIONS (4" letters)	24" (rectangle) 36"	Use in conjunction with "Logging Operations Next Miles" and "Logging Operations."
6. TREE FELLING AHEAD (3" letters)	24" (diamond) 24"	Required 200 feet in advance of danger area where timber is being felled adjacent to all roads, including temporary roads, and trails.
7. ROAD MACHINERY AHEAD (3" letters)	24" (diamond) 24"	Required at least 200 feet in advance of Purchaser road maintenance operations on roads listed in Schedule CT5.31#.

TRAFFIC CONTROL PLAN AND SPECIFICATIONS - BT6.33 Safety (continued)

All signs shall meet requirements as specified in Parts I and VI of the Manual of Uniform Traffic Control Devices (MUTCD).

Sign borders and lettering shall be black. Borders are 1/2 inch wide, inset 1/2 inch from outside edge of sign. All sign backgrounds shall be orange, except signs #1 and 5 which shall be reflectorized orange.

Signs shall be installed on posts, with a 5 foot minimum ground clearance, or on temporary supports complying with MUTCD standards.

All signs are to be removed or covered when operations are interrupted for seasonal nonuse or other extended periods.

Purchaser shall furnish flag personnel and advance warning signs when cable or helicopter logging above roads or trails, felling adjacent to roads or trails, where logs being bucked may roll into roads or trails, and in areas where fallout from blasting may occur. On roads listed in CT5.31# and temporary roads, Purchaser may temporarily block the road in lieu of furnishing flag personnel.

(b) Barricades. On roads listed in CT5.31#, if Purchaser's Operations cause the traveled way or road shoulders to be constricted overnight, or longer, by such obstructions as decked logs, parked equipment, or piled slash, Purchaser shall place barricades on both sides of the encroaching obstruction to safely channel traffic around such obstructions. Barricades shall remain in place until the obstruction is removed.

Barricades shall be Type II and meet specifications in MUTCD, Part VI. Barricades must be at least 3 feet high. Rails must be at least 2 feet long. Striping shall be alternating orange and white, sloping at a 45 degree angle, and reflectorized. For rails 2 feet to 3 feet long, striping shall be 4 inches wide. For rails longer than 3 feet, striping shall be 6 inches wide. Two rails, 8-12 inches in width, must face each direction.

Barricades shall be equipped with warning lights which shall be Type A low intensity flashing and shall be maintained so as to be capable of being visible on a clear night from a distance of 3,000 feet.

(c) Other Traffic Control Methods. The posting of CB channel signs may be authorized.

On roads listed in CT5.31#, Purchaser may be authorized to install temporary gates, barricades (except cables), or natural barriers. The devices must be installed with the necessary hazard markers, be reasonably passable by Forest Service, and be removed prior to acceptance of the cutting unit being served by the road.

Sale Name: Haywire Thin	Page	140c
TRAFFIC CONTROL PLAN AND SPECIFICATIONS - BT6.33 SAFETY (continued	d)	
Part II. Specific Requirements:		
There are no additional specifications.		
Purchaser and Forest Service agree to the above stated requirment the Traffic Control Plan:	s of	
Name Name		
Title Title		
Date		

## TABLE A PURSUANT TO CT5.12# - USE OF ROADS BY PURCHASER (06/1999)

#### Restricted Road List

		Term	ini					
Road Number	Road Name	From	То	Map Legend	Description of Restrictions			
All Roads listed in CT5.31# and all Temporary Roads.				R	Road use for vehicles over 26,000 pounds GVWR shall be suspended when rainfall exceeds 1.0 inch in 24 hours. This suspension shall be for 24 hours after the 1.0-inch rain event. Purchaser shall monitor rainfall accumulation from a Remote Automated Weather Station (RAWS) location to be agreed upon at the Prework Meeting.			

## Title and Date of Governing Road Rules Document:

Siuslaw National Forest Road Rule

(Commercial Road Rules)

January 1998

(Effective Date)

## CONTRACT ROAD MAINTENANCE REQUIREMENTS SUMMARY TABLE PURSUANT TO CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

#### Contract Road Maintenance Requirements Summary

	Ter	mini			Applicable Prehaul Road Maintenance Specifications									
Road	From	То	Miles	T-811	T-813	T-831	T-832	T-834	T-836	T-838	T-842	T-851	T-854	
3210 Seg. 1	Co Rd 807	MP 3.7	3.7		D	P	P	Р	P		P	P	P	
3210 Seg. 2	MP 3.7	Jct 58	1.9	P	P	P	P	P	P		P	P	P	
3215	Co Rd 807	Unit 4	1.0	P	P	P	P	Р		P	Р	P	P	
3705	Co Rd 807	Jct 58	3.6	P	P	P	P	Р	P		P	P	P	
5800	Jct 3210	Jct 3705	5.6	Р	Р	Р	Р	Р	P		Р	Р	Р	

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

	Ter	mini		Applicable During Road Maintenance Specifications										
Road	From	То	Miles	T-811	T-813	T-831	T-832	T-834	T-836	T-838	T-842	T-851	T-854	
3210 Seg. 1	Co Rd 807	MP 3.7	3.7		D	P	P	P	P		P	P	P	
3210 Seg. 2	MP 3.7	Jct 58	1.9	P	P	P	P	Р	P		P	P	P	
3215	Co Rd 807	Unit 4	1.0	P	P	P	P	P		P	P	P	P	
3705	Co Rd 807	Jct 58	3.6	P	P	P	P	Р	P		P	P	P	
5800	Jct 3210	Jct 3705	5.6	P	P	P	P	Р	P		P	P	P	

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

	Ter	mini			Applicable Posthaul Road Maintenance Specifications										
Road	From	То	Miles	T-811	T-813	T-831	T-832	T-834	T-836	T-838	T-842	T-851	T-854		
3210 Seg. 1	Co Rd 807	MP 3.7	3.7		D	P	Р	Р	P		P	P	P		
3210 Seg. 2	MP 3.7	Jct 58	1.9	P	P	P	Р	Р	P		P	P	P		
3215	Co Rd 807	Unit 4	1.0	P	P	P	Р	Р		P	P	P	P		
3705	Co Rd 807	Jct 58	3.6	P	P	P	Р	Р	P		P	P	P		
5800	Jct 3210	Jct 3705	5.6	P	P	P	Р	P	P		P	P	P		

P = Purchaser Performance Item, D = Deposit to Forest Service, D3 = Deposit to Third Party

Description of work required by the above listed T-specs is shown in the following ROAD MAINTENANCE REQUIREMENTS SPECIFICATION table, and included in the timber sale contract.

## ROAD MAINTENANCE REQUIREMENTS SPECIFICATION TABLE PURSUANT TO CT5.31# - ROAD MAINTENANCE REQUIREMENTS (07/2001)

_	_			3.011		-			0.,200	<del>- /</del> _	_	_	
1	2		3		4	5	Ť	6		. 7	8	9	
	Special							Dust				Po	st
Road No.	Project	Tr	avel Way	У	Brushing	<u>1</u> /	Ab	patement		Seasonal		На	ul
and	Specifi-		Х		And	_		Applic		Mainte-	Snow		
Termini	cation	Width	Slope	Comp	Log Out	Surfacing	Product	Rate	Width	nance	Removal	Block	Treat
3210 Seg. 1 Co Rd 807 - MP 3.7	T815-F1	EX	AI	А	2ft R&L								
3210 Seg. 2 MP 3.7 - Jct 58 Rd		EX	AI	A	2ft R&L	160 CY Grading C							
3215 Co Rd 807 - MP 1.0	T835F12-2	EX	AI	А	2ft R&L	50 CY Grading A				W			P
3705 Co Rd 807 - Jct 58 Rd		EX	AI	А	2ft R&L	270 CY Grading C							
5800 Jct 3210 - Jct 3705		EX	AI	A	2ft R&L	380 CY Grading C							
Water bars*						20 Cy Grading Q							

 $<sup>\</sup>underline{1}/$  All materials incorporated into work from Purchaser provided sources will be "weed free". The Contracting Officer may request written confirmation of methods utilized to insure weed-free status.

 $<sup>^{\</sup>star}$  Waterbar rock is included to patch over bladed out existing water bars

# $\frac{\text{ROAD MAINTENANCE REQUIREMENTS SPECIFICATION CODES TABLE PURSUANT TO}}{\text{CT5.31\#} - \text{ROAD MAINTENANCE REQUIREMENTS (07/2001)}}$

Column No.	Heading	Entry	Explanation
	Any	Blank	Except as otherwise described, no entry indicates Purchaser is not authorized or required to perform the work item(s).
	Any	RC	This work requirement applies only when haul of sale related construction materials occurs.
2	Special Project Specification	Number	Entry indicates Special Project Specification which applies.
3	Travel Way	EX	Purchaser shall maintain the traveled way to the width existing upon entry, or at the completion of Specified Road work.
	Nu		Purchaser shall maintain the traveled way to the standard width indicated by the entry, plus curve widening, in accordance with Section T-811. If required, the road template shall be shaped to this width and to the designated cross slope before haul and during recurring maintenance.
		IS, C, OS, F, or AI	Cross slopes are designated as: IS (Inslope), C (Crown), OS (Outslope), F (Flat), AI (As Is).
		A or B	If compaction is required.
4	Brush and Log Out		Purchaser shall remove brush for specified width on either or both the right (R) side or left (L) side of road.
		As Staked	Limits of brushing are as staked or marked in the field.
		OPT	Purchaser may use hand or mechanical means of brushing.
		Н	Only hand brushing may be used.
5	Surfacing		Purchaser shall place surfacing on roads listed according to the grading indicated.
		D	Contractor is to make deposits for listed road maintenance, including surface rock replacement.
6	Dust Abatement	OPT	Product selection is Purchaser's choice from those listed in Section T-812.
		Product Abbr.	Unless otherwise agreed, Purchaser is restricted to product listed corresponding to the abbreviation shown in Section T-812; (i.e., LigS = Lignon Sulfonate) Application rates are estimated amounts.
		EX	Purchaser shall abate dust on the existing width
		Numbers	Purchaser shall abate dust to the width indicated by entry.
7	Seasonal Maintenance	W	Waterbars and/or crossditching shall be required prior to expected seasonal precipitation.
		В	Entrance barriers shall be installed by Purchaser prior to nonuse periods.
8	Snow Removal	TS	Snowplowing authorized for Purchaser's Operations without recreation access being provided per Section T-803 requirements.
		JU	Snowplowing authorized, but must provide for recreation joint use per Section T-803 requirements.
		Blank	Snowplowing is not authorized. Forest Service may authorize plowing by permit when not in conflict with other uses.
9	Post Haul	P	P denotes that work is Purchaser's Responsibility to perform.

# SCHEDULE PURSUANT TO CT6.315# - SALE OPERATION SCHEDULE (06/1994)

Citting Unit	Operating Conditions	Purpose
3 Portions of R/W**	Hourly Restrictions: All operations, except haul, that are within 100 yards of mature or old growth forest* and involve use of heavy equipment or power-tools (such as chainsaws) shall be restricted between April 1 and September 15 to two hours after sunrise to two hours before sunset.	1/
R/W	All ditch clean-out or brushing with ground disturbing equipment, such as an excavator, shall be restricted to July 1 through October 15.	2/
All	Installing and removing in-stream culverts shall be restricted to July 1 through August 31.	2/
All	All road brushing on system roads not subject to T-836, T-838, or T-839 in CT5.31# shall be restricted to June 1 through September 15.	<u>3</u> /
All	Road Construction/Reconstruction (including Temporary Roads) and landing construction shall be restricted to July 1 through October 15.	<u>2</u> /
3	Felling and yarding and machine piling within 100 yards of mature or old growth forest* shall be restricted to August 6 through February 28.	1/
3	<pre>Haul-Move-in/out: restricted to June 15 to October 15 temporary road, no restrictions system road. Ground-based felling yarding and machne piling: shall be restricted to June 15 through October 15.</pre>	2/
4, 5	<pre>Haul-Move-in/out: restricted to June 15 to October 15 on native surface roads. Ground-based felling yarding and machne piling: shall be restricted to June 15 through October 15.</pre>	<u>2</u> /

<sup>\*</sup> See attached map for cutting units or portions of cutting units that fall approximately within the 100 yards of mature or old growth forest (restricted areas).

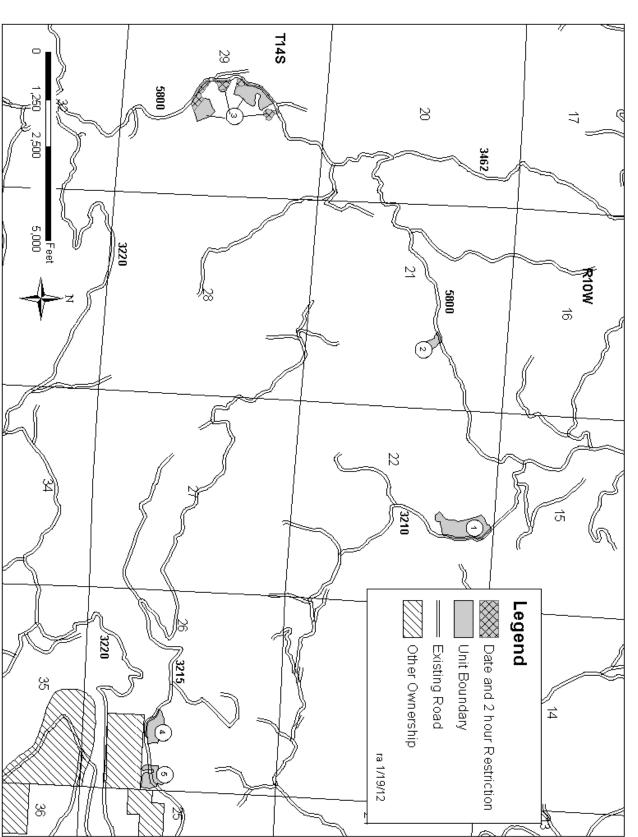
<sup>\*\*</sup> Proximity of mature or old-growth forest to roads (R/W) will require on the ground determination for hourly restrictions for any road work involving use of heavy equipment or power-tools.

 $<sup>\</sup>underline{1}/$  To minimize disturbance to Marbled Murrelets or Spotted owls during the nesting season.

<sup>2/</sup> To minimize streamcourse sedimentation due to wet weather operations.

<sup>3/</sup> To maximize the effectiveness of brushing along the haul route.

MAP OF RESTRICTED AREAS PURSUANT TO CT6.315# - SALE OPERATION SCHEDULE (06/1994)



#### TABLE PURSUANT TO CT6.41# - SPECIFIC REQUIREMENTS (01/2000)

#### FELLING METHODS PAYMENT UNIT

Trees shall be felled away from paved roads, private property, Streamcourses, buffers, and leave areas, and to the lead of cable corridors and ground-based skid roads. Any tree that falls in a Streamcourse or a buffer shall be left in place unless otherwise approved by the Forest Service for removal.

## FELLING EQUIPMENT

PAYMENT UNIT

Mechanical felling machinery may be used on portions of units where ground based yarding is specified, or otherwise use chainsaw and wedges.

All

All

TABLE PURSUANT TO CT6.42# - YARDING/SKIDDING REQUIREMENTS (04/2003)

TABLE PURSUANT TO CT6.42# - YARDING/SKIDDING REQUIREMENTS (04)	/2003)
YARDING/SKIDDING REQUIREMENTS	PAYMENT UNIT
A skyline system capable of:  • transporting logs at least 600 feet (rigging length of 900 feet),  • keeping one end of the log suspended during inhaul (logs may drag on the ground within 100 feet slope distance of tailholds and 50 feet slope distance of landings),  • lateral yarding up to 100 feet,  • downhill yarding,  • operating in a multispan configuration,  • keeping the entire length of logs fully suspended above the ground 50 feet each side of the streamcourse during inhaul when yarding across streamcourses.  Skyline corridors/cableways:  • Location shall be approved in advance of felling	1,2,3
<ul> <li>operations.</li> <li>minimum spacing shall be 120 feet at the far end.</li> <li>maximum width of 12 feet.</li> <li>no more than 20 percent of the canopy would be removed in any given 1,000-foot reach of stream when passing through riparian buffers.</li> <li>A carriage capable of:</li> <li>maintaining a fixed position on the skyline while lateral yarding</li> <li>lateral yarding up to 100 feet on either side of the skyline</li> <li>passing support jacks where intermediate supports are used.</li> </ul>	
If purchaser chooses to tailhold on private land or land under other ownership, purchaser will have to get written permission from the landowner and provide the Forest Service with a copy of the written permission.	4, 5
A ground-base machine capable of keeping one end of the log suspended during skidding. Skid trails:  • location of skid trails shall be agreed upon prior to construction and prior to felling  • maximum width of 15 feet  • average trail spacing of 100 feet The ground-base machine will not be allowed on slopes greater than 30 percent. Where practical, machine shall travel on slash.	3,4,5
Prior to yarding, Forest Service shall approve included timber pursuant to CT2.35# (Option 1).	All
The tops shall be severed or broken off from at least 20 percent of the felled trees prior to yarding. These severed or broken tops shall be left on site (not yarded or removed) scattered over 80 percent of the cutting unit. A top is defined as that portion of the tree 6 inches DIB or smaller on the large end.	All

# $\frac{\text{APPLICATION SCHEDULE PURSUANT TO CT6.6\# - EROSION CONTROL AND SOIL TREATMENT}}{\text{BY PURCHASER}} \quad (07/2001)$

	AREAS	SEEL	)	FERTIL	IZER	MULCH		
PAYMENT	A) SKID TRAILS B) FIRELINES							
UNIT	C) TEMP. ROADS	APPLICATION		APPLICA	ATION	APPLICATION		
OR UNIT NUMBER	D) LANDINGS E) OTHER	SPECIES MIXTURE	LBS/AC	TYPE	LBS/AC	TYPE	LBS/AC	
All	A, C, D	1/	22	None	150	None		

 $<sup>\</sup>underline{1}/$  Blue Wild Rye grass seed will be provided by the Forest Service. A co-op deposit of \$0.38/ccf will be collected to cover the cost of the seed.

#### SPECIFICATIONS PURSUANT TO CT6.74# - SLASH TREATMENTS REQUIREMENTS (02/2002)

 $\underline{\text{CONSTRUCTION SLASH}}$ . Unless otherwise agreed, all slash as defined in CT6.7 - Slash Disposal shall be treated.

SPECIFIC DISPOSAL METHOD. Purchaser shall pile or scatter all construction slash. Scattering of construction slash shall be outside the Temporary Road clearing limits without damaging trees. All logs shall be limbed. Logs and stumps shall be placed away from trees, positioned so they will not roll, and not be placed on top of one another. Piling of construction slash shall be in accordance with Machine Pile Landings 2-Method of Treatment and 3-Location of Piles below.

In no event will Construction Slash be buried under temporary road or landing embankments.

#### MACHINE PILE/SCATTER LANDINGS

- 1. <u>AREA SUBJECT TO THIS PROVISION</u>. All landings and the area within 30 feet of the perimeter of these landings shall be machine piled.
- 2. METHOD OF TREATMENT. METHOD OF TREATMENT. Unless otherwise agreed, all slash as defined in CT6.7 Slash Disposal shall be treated as per Method a, Method b, or Method c below, or a combination thereof, at the descretion of the sale administrator.

Method a: All slash other than those specified pieces described in Method b below shall be placed in a compact, dirt free, uniform pile for later disposal by the Forest Service. The pieces shall be placed so that shifting or rolling will not occur and so that no material will extend over the edge of disposal areas. Piles shall be no higher than 15 feet. Method b: All pieces meeting non-saw specifications and longer than 10 feet shall be placed in a separate pile(s). The pieces in the pile shall be placed parallel to each other similar to log decks, and placed where shifting and rolling will not occur. Unless otherwise agreed, these piles shall be no higher than 6 feet.

Method c: All slash other than that described above in Method b shall be scattered across landings, Temporary Roads, skyline corridors, or other openings in the immediate area, as designated by Forest Service sale administrator. Scattering shall be accomplished in a manner to avoid windrows or piling and shall not exceed a depth of 1 foot from natural forest floor or road/landing surface.

#### 3. LOCATION OF PILES.

- a. Piles as defined in Method a above, shall be located in the center of openings near or on the landings and as far as possible away from residual trees. Unless otherwise agreed, the base of the piles shall be no closer than 10 feet from standing trees. Excess slash which cannot be piled as per these specifications, will be required to be hauled to a disposal site as designated by the Forest Service.
- b. Piles as defined in Method b above, shall be located in agreed upon openings near the landing area adjacent to the road system and be located at least 10 feet away from the pile as defined in a Location of Piles "a" above. These piles can be placed adjacent to standing trees.
- 4. <u>TIMING OF PILES</u>. Piling of slash shall be done concurrent with yarding on each landing, or within 10 days of completion of yarding on each landing.

#### SPECIFICATIONS PURSUANT TO CT6.74# - SLASH TREATMENTS REQUIREMENTS (02/2002)

5. COVERING PILES. During the construction of each pile, a 100 sq ft (10'x10') piece of 4 ml polyethylene plastic shall be placed on top of the pile when the pile is 2/3 of the way built. The remaining 1/3 of the slash shall be placed on top of the plastic. Kraft-waterproof paper or other similar product may be substituted for the 4 ml plastic.

6. Pursuant to CT6.7 the following rate will be used to determine charges for measures mentioned above that are waived or taken over by Forest Service: \$193.75/Pile to machine pile landings, \$43.75/Pile to cover machine pile

#### SCATTER SLASH ALONG ROADS

- 1. <u>SLASH SPECIFICATION</u>. Unless otherwise agreed, all logging slash more than 2 feet long and less than 3 inches in diameter shall be scattered when in concentrations exceeding 1 foot depth above the natural forest floor and 25 square feet in surface area. Material which has a portion larger than 3 inches in diameter must be limbed and bucked at 3 inches in diameter with the resulting slash meeting the above specification requiring scattering.
- 2. AREA SUBJECT TO THIS PROVISION. Slash from Cutting Units 2 and 3 that is within 25 feet slope distance of Road 5800 meeting slash specification above shall be scattered away from the road, within the cutting unit, and beyond 25 feet slope distance.
- 3. METHOD OF TREATMENT. Unless otherwise agreed, slash meeting the above slash specification shall be hand or machine scattered or incorporated into the landing piles. Any machine used for scattering shall remain on the running surface of the road at all times. Slash shall not be windrowed or piled (unless added to the landing pile). The scattered slash shall be no more than one-foot in depth, measured from mineral soil.
- 4.  $\underline{\text{TIMING OF PILES}}$ . Scattering of slash shall be done concurrent with yarding in the unit, or within 10 days of completion of yarding.
- 5. Pursuant to CT6.7 the following rate will be used to determine charges for measures mentioned above that are waived or taken over by Forest Service: \$559.00/acre to scatter slash.